

# Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 and 2020/878/  
EU

Printing date 03.06.2025

Version number 8 (replaces version 7)

Revision: 07.05.2025

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier****Trade name: CuP281 (CP 104), B-Cu89PAg-645-815, CuRophos 5**

UFI: not applicable.

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

Application of the substance / the mixture *Hard solder***1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

FELDER GMBH

Im Lipperfeld 11

D-46047 Oberhausen

Tel.: 0208/8 50 35-0

Fax.: 0208/2 60 80

<http://www.felder.de>e-mail: [info@felder.de](mailto:info@felder.de)**Further information obtainable from:**

lab

(mo-thu. 8:00 a.m. - 4:00 p.m./ fr. 8:00 a.m. - 1:00 p.m.)

email: [mprobst@felder.de](mailto:mprobst@felder.de)**1.4 Emergency telephone number:** Not required as this product is not subject to labelling.

EuPCS: PC-TEC-24

## SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

**2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 *Void*Hazard pictograms *Void*Signal word *Void*Hazard statements *Void***Additional information:**

EUH210 Safety data sheet available on request.

**2.3 Other hazards****Results of PBT and vPvB assessment**PBT: *Not applicable.*vPvB: *Not applicable.*

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures****Description:** Mixture: consisting of the following components.**Dangerous components:**

CAS: 7440-50-8 EINECS: 231-159-6 Index number: 029-024-00-X Reg.nr.: 01-2119480154-42	copper	88.6-89.4%
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 7440-22-4 EINECS: 231-131-3 Reg.nr.: 01-2119555669-21	silver substance with a Community workplace exposure limit	4.8-5.2%

**further ingredients:**

phosphor

Reg.nr.: 01-2119448009-39

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information:** Take affected persons out into the fresh air.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product off the skin.

Seek medical treatment.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** If symptoms persist consult doctor.

**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

### 5.3 Advice for firefighters

**Protective equipment:** Do not inhale explosion gases or combustion gases.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up:** Allow to solidify. Pick up mechanically.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Extractors are required on all machines used for thermal processing or splinter removal processes.

**Information about fire - and explosion protection:** No special measures required.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Store away from foodstuffs.

**Further information about storage conditions:** Store in dry conditions.

**Storage class:** 13

**7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with limit values that require monitoring at the workplace:**

**7440-50-8 copper**

WES (Australia) Long-term value: 1\* 0.2\*\* mg/m<sup>3</sup>  
\*dust & mists (as Cu) \*\*fume

AGW (Germany) Long-term value: 0.045 (A) 0.200 (E) mg/m<sup>3</sup>  
8 (II) (A) 4 (II) (E); AGS, 10, als Cu

WEL (Great Britain) Short-term value: 2\*\* mg/m<sup>3</sup>  
Long-term value: 0.2\* 1\*\* mg/m<sup>3</sup>  
\*fume \*\*dusts and mists (as Cu)

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OEL (Ireland)	Long-term value: 0.2* 1** mg/m <sup>3</sup> *fume **dusts and mists
<b>7440-22-4 silver</b>	
IOELV (EU)	Long-term value: 0.1 mg/m <sup>3</sup>
WES (Australia)	Long-term value: 0.1 mg/m <sup>3</sup>
AGW (Germany)	Long-term value: 0.1 E mg/m <sup>3</sup> 8(II);DFG, EU
WEL (Great Britain)	Long-term value: 0.1 mg/m <sup>3</sup>
OEL (Ireland)	Long-term value: 0.1 mg/m <sup>3</sup> IOELV

**Regulatory information**

WES (Australia): Workplace exposure standards for airborne contaminants

AGW (Germany): TRGS 900

WEL (Great Britain): EH40/2020

OEL (Ireland): 2024 CoP for the Safety, Health and Welfare at Work

IOELV (EU): (EU) 2019/1831

**recommended monitoring procedures in accordance with 2020/878/EU no. 8.1.2:**

7440-50-8 copper: BIA 7755 (D), NIOSH 7301(E), MétroPol Fiche 003(F), MTA/MA-025/A92(ESP)

7440-22-4 silver: ISO 15202(F, E), BIA 8600(D), NIOSH 7301(E)

**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls**

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

**Appropriate engineering controls:**

Ensure adequate ventilation.

Remove the fumes by suitable suction devices.

**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:** Avoid skin contact with the liquefied material.**Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

**Hand protection** Leather gloves**Penetration time of glove material** Value for the permeation: Level ≤ -**Eye/face protection** in cases of application: protective goggles**Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

Colour:	Copper coloured
Odour:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	645-815 °C
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not determined.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Insoluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.

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**Density and/or relative density**

Density at 20 °C:	8.6 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not applicable.
Particle characteristics	See section 3.

**9.2 Other information****Appearance:**

Form: Solid

**Important information on protection of health and environment, and on safety.**

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

**Solvent content:**

Organic solvents: 0.0 %

VOC (EC) 0.00 %

**Change in condition**

Evaporation rate: Not applicable.

**Information with regard to physical hazard classes**

Explosives: Void

Flammable gases: Void

Aerosols: Void

Oxidising gases: Void

Gases under pressure: Void

Flammable liquids: Void

Flammable solids: Void

Self-reactive substances and mixtures: Void

Pyrophoric liquids: Void

Pyrophoric solids: Void

Self-heating substances and mixtures: Void

Substances and mixtures, which emit flammable

gases in contact with water: Void

Oxidising liquids: Void

Oxidising solids: Void

Organic peroxides: Void

Corrosive to metals: Void

Desensitised explosives: Void

**SECTION 10: Stability and reactivity****10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions**

No dangerous reactions known.

Reacts with strong acids and oxidising agents.

**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known.**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** Based on available data, the classification criteria are not met.**Primary irritant effect:****Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** Based on available data, the classification criteria are not met.

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**STOT-repeated exposure** *Based on available data, the classification criteria are not met.***Aspiration hazard** *Based on available data, the classification criteria are not met.***11.2 Information on other hazards****Endocrine disrupting properties***None of the ingredients is listed.***SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** *No further relevant information available.***chronic aquatic toxicity:***Classification conditions Copper (029-024-00-X) Environmental hazard not fulfilled.**Classification conditions Copper (029-026-00-0) specific surface area < 0,67 mm<sup>2</sup>/mg.***12.2 Persistence and degradability** *No further relevant information available.***12.3 Bioaccumulative potential** *No further relevant information available.***12.4 Mobility in soil** *No further relevant information available.***12.5 Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***12.6 Endocrine disrupting properties***The product does not contain substances with endocrine disrupting properties.***12.7 Other adverse effects** *No further relevant information available.***Additional ecological information:****General notes:***The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary**Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water**Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.***SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** *Contact manufacturer for recycling information.***European waste catalogue***17 04 07: mixed metals***inner packaging:***15 01 02: plastic packaging***overpack:***15 01 01: paper and cardboard packaging***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***SECTION 14: Transport information****14.1 UN number or ID number****ADR, ADN, IMDG, IATA**

Void

**14.2 UN proper shipping name****ADR, ADN, IMDG, IATA**

Void

**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class**

Void

**14.4 Packing group****ADR, IMDG, IATA**

Void

**14.5 Environmental hazards:****Marine pollutant:**

No

**14.6 Special precautions for user***Not applicable.***14.7 Maritime transport in bulk according to IMO instruments***Not applicable.*

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UN "Model Regulation":

Void

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## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Directive 2012/18/EU

**Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

**REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)** *None of the ingredients are included.*

**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

*None of the ingredients is listed.*

#### REGULATION (EU) 2019/1148

**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

*None of the ingredients is listed.*

#### Annex II - REPORTABLE EXPLOSIVES PRECURSORS

*None of the ingredients is listed.*

#### Regulation (EC) No 273/2004 on drug precursors

*None of the ingredients is listed.*

**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

*None of the ingredients is listed.*

#### National regulations:

**Information about limitation of use:** *Employment restrictions concerning juveniles must be observed.*

**Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

**15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

## SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

#### Reasons for changes:

10.26.2015: Section 1, 8, 15 adaptation to VO 453/2010/EC, 830/2015/EU, 2012/18/EU

02.22.2017: section 8.1, 8.2

09.09.2018: section 13

02.02.2020: section 1, 3, 15, 16

05.16.2022: section 15

07.08.2024: section 1, 12

07.05.2025: section 1, 8, 12, 16

**Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:**

#### Relevant phrases

H400 *Very toxic to aquatic life.*

H410 *Very toxic to aquatic life with long lasting effects.*

**Contact:** *Dr. M. Probst*

**Version number of previous version:** 7

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

**Safety data sheet SD2020**